

SAN ANTONIO/AUSTIN

Global warming will further challenge south central Texas' rapid development and expanding population.

WATER

South central Texas' water supply is especially vulnerable to global warming as an increase in temperature will cause an **increase for water demand in irrigation and municipal use, but will also increase evaporation and decrease the Edwards Aquifer recharge.**

A study conducted by the American Society of Civil Engineers for the US EPA found that global warming is likely to exacerbate the water resource problems that already exist in the area. **Specifically, the authors warn, "if there is continued groundwater depletion, you will see degraded water quality and the possible extermination of four or five endangered species" (ASCE, 1998).**

CLIMATE EXTREMES

Studies suggest that there will be a more unstable atmosphere in the future, which will probably result in more frequent heavy rainfalls and possibly increased hail and tornado risk. Extended periods of droughts are also projected for this region

Increased severity of heat waves may lead to an increase in illness and death, particularly among the young, the elderly, the poor, the frail and the ill.

CLIMATE MODELS PROJECT A HIGHER FREQUENCY OF INTENSE RAIN EVENTS LIKE THE 1999 20 INCH-ONE DAY DELUGE IN SAN ANTONIO. INTENSE RAINFALL EVENTS OFTEN EXCEED THE RECHARGE RATES OF AQUIFERS.

REGION PROFILE -SOUTH CENTRAL-



POPULATION (2000) – 3,252,913

SIGNIFICANT SOURCES OF GREENHOUSE GASES:

- ELECTRIC UTILITIES
- TRANSPORTATION

HOT SPOTS

DAYS OVER 100°F COULD INCREASE SIX-FOLD.

DECREASED AQUIFER RECHARGE

INCREASED FLOODING

WILDLIFE

Warmer, drier conditions and reduced summer soil moisture are projected to adversely affect protected wildlife in south central Texas. Critical habitat loss for two endangered songbirds, the golden checked warbler and the black-capped vireo are expected.

